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WHAT IS CLAIMED IS:
~~Patent Claims~~

    1. Mobile radiotelephone device for the wireless transmission of QPSK-modulated data, comprising

    -- a controller (22) that is designed for a transmission of GFSK-modulated data, and

5   -- an adaptor module (23) that converts GFSK-modulated data output by the controller (22) into QPSK-modulated data to be transmitted or, respectively, that converts received, QPSK-modulated data into GFSK-modulated data and gives them to the controller (23).

    2. Mobile radiotelephone device according to claim 1, characterized in that

10   the adaptor module (23) outputs a synchronization signal to the controller (22) in the synchronized conditions.

    3. Mobile radiotelephone device according to claim 1 or 2, characterized in that the controller is a DECT controller (22).

    4. Mobile radiotelephone device according to one of the claims 1, 2 or 3,

15   characterized in that the adaptor module (23) synchronizes to a received, QPSK-modulated signal.

    5. Mobile radiotelephone device according to claim 4, characterized in that the adaptor module (23) time-shifts the synchronization signal for the controller (22) dependent on its synchronization onto the QPSK-modulated signal.

20   6. Mobile radiotelephone device according to one of the preceding claims, characterized in that the adaptor module (23) drives an RF module (4, 5) such that the data are modulated onto a carrier frequency fx that lies outside the DECT band.

    7. Mobile radiotelephone device according to claim 6, characterized in that the carrier frequency fx lies in a 2.4 GHz band.

25   8. Mobile radiotelephone device according to one of the preceding claims, characterized in that the adaptor module is an ASIC (23).

    9. Mobile radiotelephone device according to one of the preceding claims, characterized in that the adaptor module (23) converts GFSK-modulated data into pi/4 QPSK-modulated data or, respectively, converts received pi/4 QPSK-modulated data

30   into GFSK-modulated data.

10. Method for the wireless transmission of QPSK-modulated data with a controller (22) that is designed for a transmission of GFSK-modulated data, whereby an adaptor module (23) converts GFSK-modulated data output by the controller (22) into QPSK-modulated data to be transmitted or, respectively, converts received, QPSK-modulated data into GFSK-modulated data and gives them to the controller (23).

11. Method for the wireless transmission of QPSK-modulated data according to claim 10, characterized in that the adaptor module (23) outputs a synchronization signal to the controller (22) in the synchronized condition.

12. Method according to claim 11, characterized in that the controller is a DECT controller (22).

13. Method according to one of the claims 11 or 12, characterized in that the adaptor module (23) synchronized itself from a received, QPSK-modulated signal.

14. Method according to claim 13, characterized in that the adaptor module (23) time-shifts the synchronization signal for the controller (22) dependent on its synchronization onto the QPSK-modulated signal.

15. Method according to according to one of the preceding claims, characterized in that the adaptor module (23) drives an RF module (4, 5) such that the data are modulated onto a carrier frequency fx that lies outside the DECT band.

16. Method according to according to claim 15, characterized in that the carrier frequency fx lies in a 2.4 GHz band.

17. Method according to according to one of the claims 10 through 16, characterized in that the adaptor module (23) converts GFSK-modulated data into pi/4 QPSK-modulated data or, respectively, converts received pi/4 QPSK-modulated data into GFSK-modulated data.

18. Method according to one of the claims 10 through 17, characterized in that the carrier frequency fx is changed after a predetermined time duration.

19. Method according to claim 18, characterized in that the carrier frequency fx is changed after a time slot (Zx) or a frame of the transmission.